

plem enter
5/25/04

1. (currently amended): A method for detecting pregnancy in a bovine animal comprising:
- (a) obtaining a sample from said animal; and
 - (b) contacting said sample with an antibody that binds immunologically to at least one pregnancy associated antigen (PAG), wherein said PAG is present in early pregnancy and ~~absent~~undetectable at about two months post-partum, and wherein said PAG is selected from the group consisting of PAG4 (SEQ ID NO:27), PAG6 (SEQ ID NO:29), PAG7 (SEQ ID NO:30), PAG 16 (SEQ ID NO:46), PAG 17 (SEQ ID NO:48), PAG 20 (SEQ ID NO:54) and PAG 21 (SEQ ID NO:56); and
 - (c) detecting said PAG bound to said antibody;

whereby the presence of said PAG in said sample indicates that said animal is pregnant.

(canceled):

(original): The method of claim 1, wherein said sample is saliva, serum, blood, milk or urine.

(original): The method of claim ²/₃, wherein said sample is saliva.

(original): The method of claim ²/₃, wherein said sample is serum.

(original): The method of claim ²/₃, wherein said sample is blood.

(original): The method of claim ²/₃, wherein said sample is milk.

(original): The method of claim ²/₃, wherein said sample is urine.

(canceled)

(currently amended): The method of claim 1, wherein said detection comprises detection of ~~bovine PAG (BoPAG) 2 (SEQ ID NO:25), BoPAG4 (SEQ ID NO:27), BoPAG5 (SEQ ID NO:28), BoPAG6 (SEQ ID NO:29), BoPAG7 (SEQ ID NO:30), BoPAG9 (SEQ ID NO:32), BoPAG 7v (SEQ ID NO:40), BoPAG9v (SEQ ID NO:42), BoPAG 15 (SEQ ID NO:44), BoPAG 16 (SEQ ID NO:46), BoPAG 17 (SEQ ID NO:48), BoPAG 18 (SEQ ID NO:50), BoPAG 19 (SEQ ID NO:52), BoPAG 20 (SEQ ID NO:54) or BoPAG 21 (SEQ ID NO:56)~~ with polyclonal antisera.

(currently amended): The method of claim 1, wherein said detection comprises detection of ~~bovine PAG (BoPAG) 2 (SEQ ID NO:25), BoPAG4 (SEQ ID NO:27), BoPAG5 (SEQ ID NO:28), BoPAG6 (SEQ ID NO:29), BoPAG7 (SEQ ID NO:30), BoPAG9 (SEQ ID NO:32), BoPAG 7v (SEQ ID NO:40), BoPAG9v (SEQ ID NO:42), BoPAG 15 (SEQ ID NO:44), BoPAG 16 (SEQ ID NO:46), BoPAG 17 (SEQ ID NO:48), BoPAG 18 (SEQ ID NO:50), BoPAG 19 (SEQ ID NO:52), BoPAG 20 (SEQ ID NO:54) or BoPAG 21 (SEQ ID NO:56)~~ with polyclonal antisera.

~~NO:50); BoPAG 19 (SEQ ID NO:52); BoPAG 20 (SEQ ID NO:54) or BoPAG 21 (SEQ ID NO:56)~~ with a monoclonal antibody preparation.

10.

~~12.~~

(previously presented): The method of claim 1, wherein said detection comprises ELISA.

~~13.~~

(previously presented): The method of claim 1, wherein said detection comprises RIA.

~~12, 14.~~

(previously presented): The method of claim 1, wherein said detection comprises Western blot.

~~15-29~~

(canceled)

~~13, 30.~~

(original): The method of claim 1, further comprising detecting a second PAG in said sample.

~~14, 31.~~

(original): The method of claim ¹³~~30~~, further comprising detecting a third PAG in said sample.

~~15, 32.~~

(original): The method of claim ¹⁰~~12~~, wherein said ELISA is a sandwich ELISA comprising binding of a PAG to a first antibody preparation fixed to a substrate and a second antibody preparation labeled with an enzyme.

~~16, 33.~~

(original): The method of claim ¹⁵~~32~~, wherein said enzyme is alkaline phosphatase or horseradish peroxidase.

~~17, 34.~~

(original): The method of claim ¹⁵~~32~~, wherein said first antibody preparation is monoclonal.

~~35-183~~ (canceled)

~~18.~~

Please add new claims 184-190 as follows:

~~184.~~

The method of claim 1, wherein said PAG is PAG4 (SEQ ID NO:27).

~~19, 185.~~

The method of claim 1, wherein said PAG is PAG6 (SEQ ID NO:29).

~~20, 186.~~

The method of claim 1, wherein said PAG is PAG7 (SEQ ID NO:30).

~~21, 187.~~

The method of claim 1, wherein said PAG is PAG 16 (SEQ ID NO:46).

~~22, 188.~~

The method of claim 1, wherein said PAG is PAG 17 (SEQ ID NO:48).

~~23, 189.~~

The method of claim 1, wherein said PAG is PAG 20 (SEQ ID NO:54).

~~24, 190.~~

The method of claim 1, wherein said PAG is PAG 21 (SEQ ID NO:56).